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Configuration Control Work Permit Procedure

Changes made in this revision:

- Updated reference figure for APS_1192991
- Added Documents/Records Created by this Procedure section
- Added Feedback and Improvement section (replaces link at end of procedure to APS Policies and Procedures Comment Form)

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ASD Division Director

AES Division Director

APS_1192930

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Configuration Control Work Permit Procedure

1 Introduction

All hardware required for radiation protection of personnel at the APS is under the administrative control of the APS. Prior to beginning work on any Radiation Safety System (RSS) device a Work Request and a Configuration Control Work Permit (CCWP) must be generated and approved. The CCWP describes the scope of work, acquires documented authorization by the required personnel based upon the risk level of the RSS work (Per the policy on “Design, Installation, and Maintenance of Radiation Safety Systems,” [APS 1189715](#)) and certifies the affected systems have been placed in a known safe state by the APS Floor Coordinator or Main Control Room (MCR) Operator before the RSS work is to begin. The CCWP must be posted if the work is to take place on the experimental floor or be available in the MCR for RSS work on the accelerator. Upon completion of the work, the required personnel attest to the stated execution of the work and sign off.

The Integrated Content Management System (ICMS) can be utilized to create, track and approve the CCWP but it *shall* be used as the final repository for all completed CCWP's.

2 Procedure

2.1 Work Flow

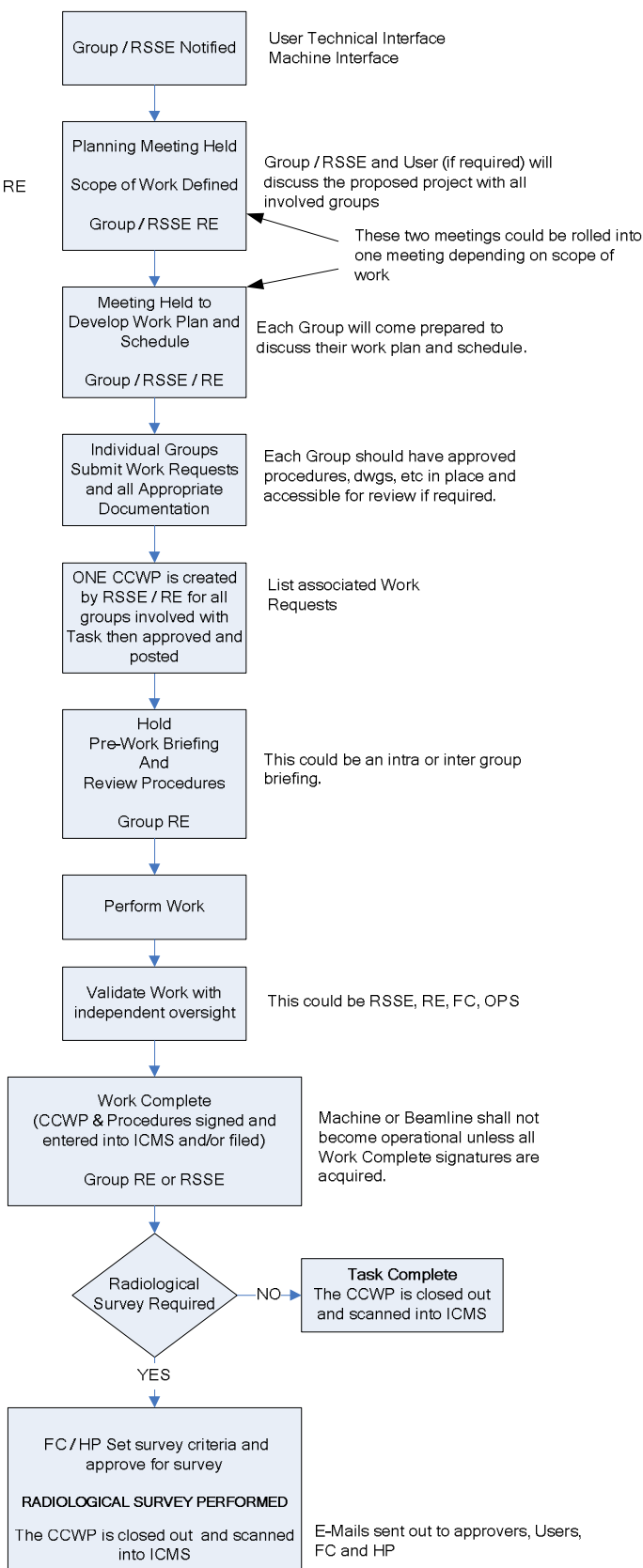
This procedure describes the work flow and processing of a CCWP for the commissioning, maintenance, diagnoses, repair, or any other modification to any part of an accelerator, beamline or front end RSS at the APS.

APS RSS Scheduled Maintenance /Modification /New Install Flowchart

New Builds RSS oversight -- RSSE / RE
MED Designed Beamline RSS New Builds oversight-- RSSE / RE
Maintenance and Modifications oversight-- RSSE / RE

ACRONYM LIST

MED - Mechanical Engineering & Design
MOM - Mechanical Operations and Maintenance
RSSE - Radiation Safety System Engineer
RE - Responsible Engineer
CCWP - Configuration Control Work Permit
ICMS - Integrated Content Management System
HP - Health Physics
RSS - Radiation Safety System
FC - Floor Coordinator
OPS - Main Control Room Operations



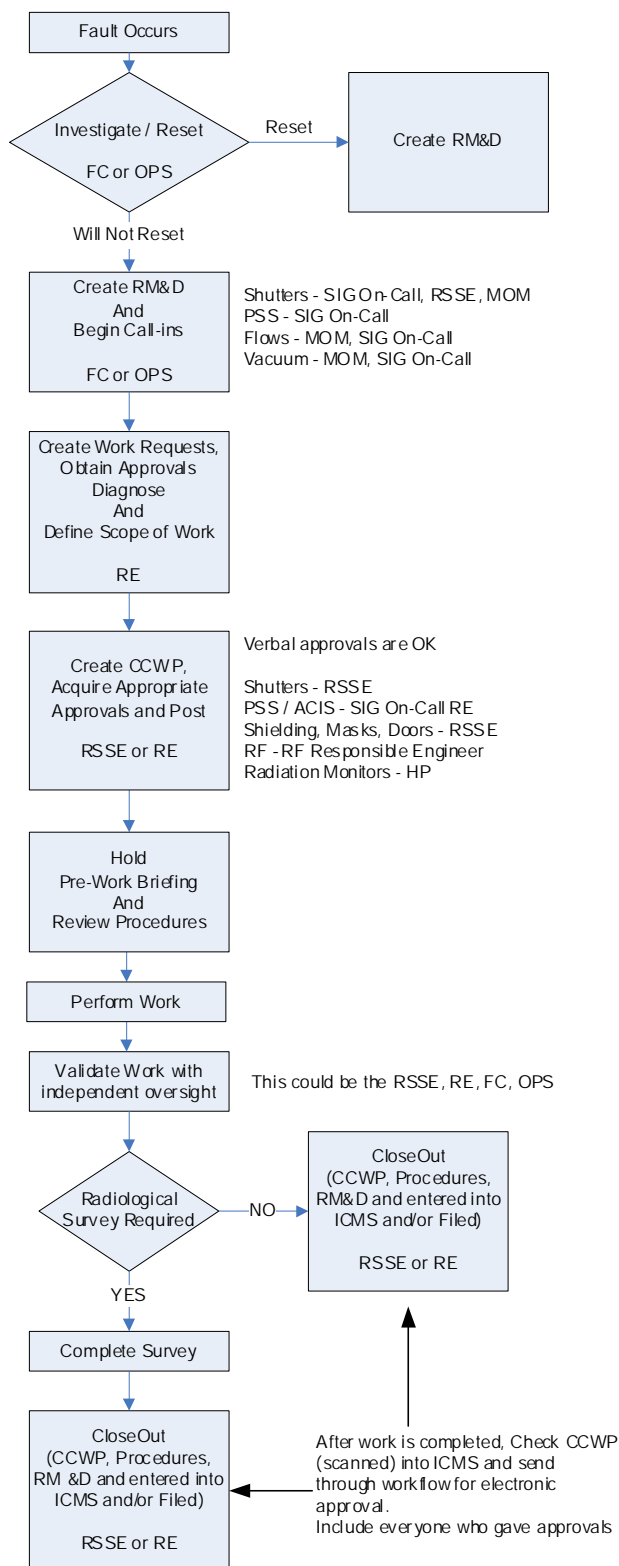
Gmm
6/15/7

Un-Scheduled RSS Work Workflow

Diagnose - Repair - 1 for 1 Replacement

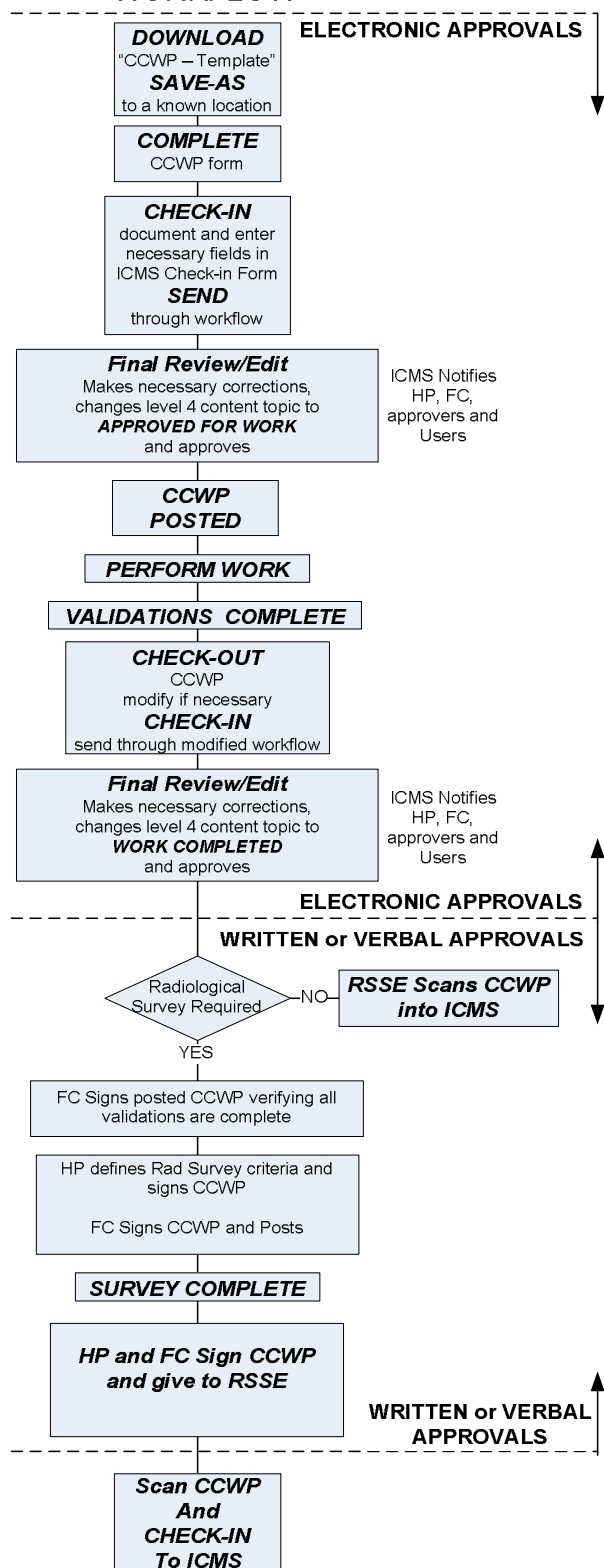
ACRONYM LIST

MED - Mechanical Engineering & Design
MOM - Mechanical Operations and Maintenance
RSSE - Radiation Safety System Engineer
RE - Responsible Engineer
CCWP - Configuration Control Work Permit
ICMS - Integrated Content Management System
HP - Health Physics
RSS - Radiation Safety System
FC - Floor Coordinator
OPS - Main Control Room Operations

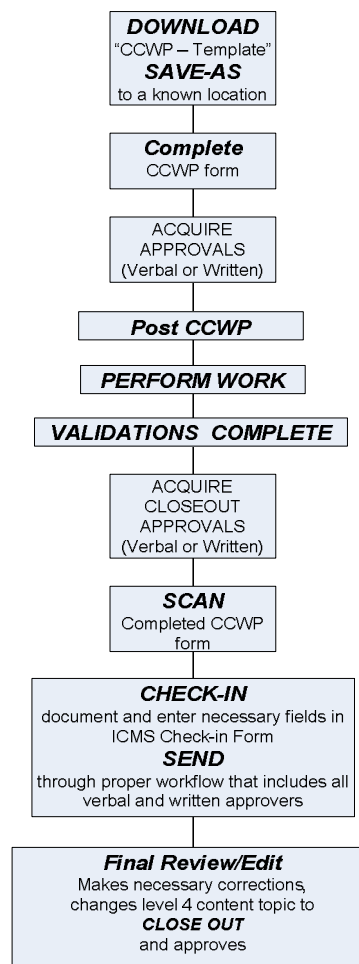


Gmm
7/10/7

CCWP FLOWCHART UTILIZING ICMS WORKFLOW



HARDCOPY CCWP FLOWCHART


GMM
6/15/2007

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2.2 The CCWP Process

Before a CCWP is created, the submitter verifies that the information needed to safely perform and complete the RSS work is available. The CCWP *can* be generated via the Integrated Content Management System (ICMS). The CCWP creation process is started by downloading the native CCWP Template WORD document from ICMS [APS 1192911](#). The submitter will now complete the CCWP form by providing the required information describing the RSS work (location, device/system, type of RSS device, risk level, related Work Requests, and scope of work), and approval workflow of those involved with the work. The RSS work covered by this permit is limited to the defined work scope, and any changes made to the work scope will require either a modified or new CCWP which will then require approval of the modifications made to the scope of work.

If diagnostic work is required to define the scope of RSS work, then a troubleshooting plan must be followed. Each APS group will be responsible for defining their own policy/guidelines for diagnosing / troubleshooting RSS components. This troubleshooting plan shall not include activities that have the potential to compromise the protection provided by the RSS. Troubleshooting/diagnosing is NOT considered “work” and does not require “approvals”, only authorization. Based upon the findings of the diagnostic work, the Work Description section of the CCWP can then be completed to identify the scope of work for the repair of the RSS component/system. Before work begins on the RSS component, verify the appropriate systems have been secured, inhibiting beam propagation into the work area and the CCWP posted. The work is then performed, the system(s) validated and all work completion approvals obtained. The Floor Coordinator (for beamline and front ends) or MCR Operator (for accelerator systems) can then authorize the RSS to return to service after verifying all CCWP specified validations are completed, signed off, and the required personnel certify that their portion of the system is ready to safely return to service. Systems may be temporarily brought on-line for system validations (e.g., interlock testing, radiation surveys).

In the event that unscheduled RSS work occurs or the availability of the approvers is limited, a hard copy of the CCWP can be created and approved by signature and/or verbally. When the work has been completed, all validations and closeout signatures will be recorded on the CCWP. Soon after closeout of the CCWP, the hard copy of the CCWP will be scanned, and entered into ICMS. Those whom gave verbal approvals will be required to electronically sign off on the scanned version of the CCWP. Once all electronic signatures have been received, the RSSE/RE will close out the CCWP.

2.3 The CCWP Form (see [page 10](#) of this document)

Step 1 – Work Description: This provides a general description of the work information to be completed by the submitter (RSSE, responsible engineer, or the Group Leader). The type of task will need to be identified in order to help identify the risk level associated with the work. The risk level is determined by the current [RSS work policy](#). To identify the exact RSS device/system that will be worked on, the submitter will need to list the component type as well as the specific RSS device as identified by the RSS label identification (if applicable).

Step 2 – Job Description/Work Approval: The submitter of the CCWP will enter a detailed job description, work plan, approved drawings and any safety/hazard issues in the area noted. Each group involved in the work will have either the Group Leader (GL), GL designate or Responsible Engineer (depending on the risk level defined in the current RSS policy) approve the CCWP before the work can begin. If an alternate approval workflow is being utilized, mark the check box.

Step 3 – Authorization to Start: The RSSE, responsible engineer, Group Leader or GL designate will approve this portion of the CCWP. Upon this approval, it is understood that all drawings, procedures, work plans, and an approved validation checklist/procedure are in place as well as verifying a pre-work briefing was held. The FC/MCR will (determine) the station(s)/system(s) that will be required to be enabled / disabled and also (determine) if a beamline will be taken globally off-line before the work is to begin. If approving electronically, this will be accomplished by making a note in the comments box after approving the CCWP. After all approvals are in place (electronic approvals) the FC/MCR will print the CCWP and the approval workflow from ICMS, and post it in its required location. If the CCWP is going through the system electronically, E-mails will be sent to all approvers, HP and other appropriate personnel to inform them the CCWP has been “APPROVED FOR WORK”

Step 4 – Validations: When the work has been completed and each group has executed their device/system validations, the CCWP will again be routed for approval. The GL or RE will sign off attesting that their device/system has been satisfactorily validated and ready to be returned to service. If the CCWP is going through the system electronically, E-mails will be sent to all approvers, HP and appropriate personnel to inform them the CCWP has advanced to the “WORK COMPLETE” status.

Step 5 - Close out: Upon obtaining all validation signatures, the CCSM, RSSE / RE and the FC/MCR sign the CCWP attesting to the tasks completeness. If no survey is required, the job is complete. Forward the CCWP to the appropriate person to be scanned into ICMS. The appropriate metadata required to enter the CCWP into ICMS can be found on [page 11](#).

Step 6 – Radiological Surveys/Return to Service: At this point, the CCWP is routed to the FC and Health Physics to allow them to determine the need for a radiological survey. If so, HP will define the criteria for the radiological survey, provide the information to the FC who will then sign and post the CCWP. Upon completion of the survey, the FC/MCR and HP will sign-off that the survey(s) were performed satisfactorily, and the system/component is ready to return to service. The completed CCWP will then be returned to the RE/RSSE who will then scan it and check it into ICMS.

3 Documents/Records Created by this Procedure

The documents/records listed below will be created in the execution of this procedure and must be retained as indicated.

Description of Document/Record (include ID number, if applicable)	Custodian	Storage Location and Medium	Retention Requirement
Configuration Control Work Permit (CCWP)	APS User Safety Officer	ICMS, electronic	5 years

4 Feedback and Improvement

If you are using this procedure and have comments or suggested improvements for it, please go to the [APS Policies and Procedures Comment Form](#)^{*} to submit your input to a Procedure Administrator. If you are reviewing this procedure in workflow, your input should be entered in the comment box when you approve or reject the procedure.

^{*} http://www.aps.anl.gov/Internal/Policies_and_Procedures/comment_form.php

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CCWP - Configuration Control Work Permit / ICMS # APS_1192911 Revision:11

Step 1 - Work Description			
Requestor:	Date:	Phone:	Organization: Division: Group: UserID:
Proposed Start Date:	Required Completion Date:	Location of Work:	
Task: <input type="checkbox"/> Repair/Testing <input type="checkbox"/> Maintenance/1-for-1 <input type="checkbox"/> New/Modified Installation <input type="checkbox"/> Labyrinth/Mini-Hutch Risk Level: <input type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High			
Component Type: <input type="checkbox"/> Shutter/ACIS Stop <input type="checkbox"/> Radiation Shielding <input type="checkbox"/> PSS/ACIS <input type="checkbox"/> RSS Other: RSS Label:			
Machine: <input type="checkbox"/> LDNAC <input type="checkbox"/> PAR <input type="checkbox"/> Booster <input type="checkbox"/> Zone F <input type="checkbox"/> Storage Ring <input type="checkbox"/> LEUTL <input type="checkbox"/> Front Ends <input type="checkbox"/> Experimental Floor			
WORK REQUEST #:			
Step 2 - JOB TITLE:			
Job Description: (work plan, approved drawings, procedure/checklist, references, etc.)			
PROCEDURE/CHECKLIST #:			
DIVISION APPROVAL TO PROCEED ICMS #:			
Work Approvals:			
<input type="checkbox"/> Alternate approval workflow per Policy on Design, Installation and Maintenance of Radiation Safety Systems (APS_1189715)			
Approval Signature		Date	Approval Signature Date
Safety Interlocks:			Mechanical/Water:
Vacuum:			Survey/Alignment:
RF/PS/Diag/CTL:			MED:
Health Physics:			ADD:
MCR/OA:			CCSM:
Step 3 - Authorization to Start. Information (drawings, specs, procedures, approval/validation checklist requirements, review committee recommendations etc.) are adequate to safely complete work, requested work is consistent with an approved design, and a pre-work briefing has been held.			
(RSSE, Responsible Engineer):		Date:	
Stations Enabled:	Stations Disabled:	Global: <input type="checkbox"/> On-line <input type="checkbox"/> Off-line	
MCR/Floor Coordinator:		Date:	
Step 4 - Validations: Responsible Engineer indicates work has been completed, validated, all safety concerns have been resolved, and all appropriate records have been updated.			
Approval Signature		Date	Approval Signature Date
Safety Interlocks:			Mechanical/Water:
Vacuum:			Survey/Alignment:
RF/PS/Diag/CTL:			MED:
Health Physics:			ADD:
MCR/OA:			Other:
Step 5 - Close out complete: All work and validations completed.			
CCSM:		Date:	
Floor Coordinator / MCR:		Date:	
RSSE / Responsible Engineer:		Date:	
Step 6 - Return to service. Type C Radiation Survey Required: <input type="checkbox"/> Yes <input type="checkbox"/> No Survey Completed (HP): Date:			
Device/system ready to return to service, on-line status restored: Floor Coordinator / MCR:		Date:	
Comments:			

RETURN THE COMPLETED CCWP TO THE APPROPRIATE PERSON TO BE SCANNED INTO ICMS

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ICMS CHECK-IN Screen

Content Check In Form - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

Content Check In Form

Standard Fields

Document Type: Form - Travel Authorization, Work Project Authorization, ECR

Title: CCWP-XXXXXXXXXXXXXXXXXXXXXXXXXXXX

Primary File: Z:\SIG Stuff\CCWP\ICMS-CCWP Proce... Browse...

Document Date: 01/24/2007 9:12 AM Ex: 1/24/07

Security Fields

Security Group: APS

Secure To: APSShare/SafetyInterlocks APSShare/SafetyInterlocks

Source Information

Comments and Keywords

Relevant Individuals

Organizational Classification

Ownership Division: AES

Ownership Group: SI

Applies To Division-Group(s): Clear...

Document Classification

Content Topic Values: -New Set- Add new Remove

Topic Level I: Radiation Safety System (RSS)

Topic Level II: Work

Topic Level III: Configuration Control Work Permit

Topic Level IV: Add

Sector Identification

Engineering

Model/Drawing Information

DCN Information

Workflow

Review 1 (Multi-select): gmm,denharto,gag Find... Clear...

Review 2: mohan Find... Clear...

Review 3 (Multi-select): jpq Find... Clear...

Review 4: wlanham Find... Clear...

Review 5: Find... Clear...

Final Review / Edit: gbanks Find... Clear...

Or

Workflow ID: Clear...

Finance

Human Resources

Other Dates

Check In Reset Quick Help

Done icmsdocs.aps.anl.gov

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